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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
09/039,606	03/16/98	VAN BRUNT	N AMBIO/001C1

QM41/0331

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EXAMINER	
CLARK, J	
ART UNIT	**PAPER NUMBER**
3733	4

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Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary	Application No. 09/039,606	Applicant(s) Van Brunt et al.
	Examiner Jeanne Clark	Group Art Unit 3733

☒ Responsive to communication(s) filed on *Mar 16, 1998* .

☐ This action is **FINAL.**

☐ Since this application is in condition for allowance except for formal matters, **prosecution as to the merits is closed** in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

A shortened statutory period for response to this action is set to expire *three* month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

Disposition of Claims

☒ Claim(s) *1, 2, 4-14, and 20-22* is/are pending in the application.

Of the above, claim(s) _____ is/are withdrawn from consideration.

☐ Claim(s) _____ is/are allowed.

☒ Claim(s) *1, 2, 4-14, and 20-22* is/are rejected.

☐ Claim(s) _____ is/are objected to.

☐ Claims _____ are subject to restriction or election requirement.

Application Papers

☒ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.

☒ The drawing(s) filed on *Mar 16, 1998* is/are objected to by the Examiner.

☐ The proposed drawing correction, filed on _____ is ☐approved ☐disapproved.

☒ The specification is objected to by the Examiner.

☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

☐ All ☐ Some* ☐ None of the CERTIFIED copies of the priority documents have been

☐ received.

☐ received in Application No. (Series Code/Serial Number) _____ .

☐ received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

*Certified copies not received: _____ .

☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

☒ Notice of References Cited, PTO-892

☐ Information Disclosure Statement(s), PTO-1449, Paper No(s). _____

☐ Interview Summary, PTO-413

☒ Notice of Draftsperson's Patent Drawing Review, PTO-948

☐ Notice of Informal Patent Application, PTO-152

--- SEE OFFICE ACTION ON THE FOLLOWING PAGES ---

Priority

1. The status of all parent applications should be included and updated in the specification. If a parent application has become a patent, the expression "now Patent No._____" should follow the filing date of the parent application. If a parent application has become abandoned, the expression "now abandoned" should follow the filing date of the parent application.

Drawings

2. The drawings are objected to as failing to comply with 37 CFR § 1.84(f) which states, "The same character must never be used to designate different parts." However, "60" has been used to designate both the AND gate and pulse-width modulator (Figure 3). Correction is required.

3. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the armature being axially aligned with the crankshaft as cited in claim 1 must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Specification

4. The disclosure is objected to because of the following informalities: The specification is because "60" has been used to designate both AND gate (i.e. page 11 line 25) and pulse-width modulator (i.e. page 8 line 18 and page 11 line 25) (see above).

Appropriate correction is required.

5. The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). Correction of the following is required: the armature being axially aligned with the crankshaft as cited in claim 1.

Claim Rejections - 35 USC § 112

6. Claims 1,2,4-14 and 20-22 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The recitation in claim 1 that an armature is axially aligned with the crankshaft is subject matter not supported by the originally filed specification and claims.

The remainder of the claims are necessarily rejected as being based on a rejected claim.

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

8. Claims 1,2,7,21 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Warwick et al. (U.S. Patent No. 4,838,263).

In regard to claim 1, Warwick teaches an apparatus for generating oscillatory air pulses in a bladder comprising an oscillatory air flow generator including an air chamber 88, a reciprocating diaphragm 106, a rod 102 operably connected as claimed, a crankshaft 96 operably connected as claimed and a first motor 92 operably connected as claimed, a positive air flow generator 130 and a control means 132,142 operatively connected with the oscillatory air flow generator for controlling frequency of air flow generator and operably connected with the positive air flow for controlling peak pressure of the air in a bladder (Figure 3 and column 5 line 51 to column 6 line 65). Warwick discloses the claimed invention except for the first motor having an armature axially aligned with the crankshaft. It would have been obvious to one of ordinary skill in the art at the time the invention was made to include an armature as claimed since the substitution of a permanent magnet D.C. brush motor in place of the D.C. motor taught by Warwick would be considered a design choice. The general teaching of a D.C. motor encompasses the more specific permanent magnet D.C. brush motor. Where the instant

specification and evidence of record fail to attribute any significance (novel or unexpected results) to a particular arrangement, the particular arrangement is deemed to have been a design consideration within the skill of the art. In re Kuhle, 526 F.2d 553, 555, 188 USPQ 7, 9 (CCPA 1975).

In regard to claim 2, Warwick teaches means 114 for connecting the oscillatory air flow generator with a bladder. **In regard to claim 7**, Warwick shows that air supply system comprising a blower 26 and a motor 27 is an equivalent structure known in the art (column 2 line 61 to column 3 line 5 and column 4 lines 15-22). Therefore, because these two positive air flow generators were art-recognized equivalents at the time the invention was made, one of ordinary skill in the art would have found it obvious to substitute the air storage tank for blower and motor structure. **In regard to claims 21 and 22**, the blower of Warwick is capable of operating as claimed. A recitation with respect to the manner in which an apparatus is intended to be employed does not impose any structural limitation upon the claimed apparatus which differentiates it from a prior art reference disclosing the structural limitations of the claim. In re Pearson, 494 F.2d 1399, 181 USPQ 641 (CCPA 1974); In re Yanush, 477 F.2d 958, 177 USPQ 705 (CCPA 1973); In re Finsterwalder, 436 F.2d 1028, 168 USPQ 530 (CCPA 1971); In re Casey, 370 F.2d 576, 152 USPQ 235 (CCPA 1967); In re Otto, 312 F.2d 937, 136 USPQ 458 (CCPA 1963); Ex parte Masham, 2 USPQ2d 1647 (BdPatApp & Inter 1987).

9. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Warwick et al. (U.S. Patent No. 4,838,263) in view of Hayek (U.S. Patent No. 4,815,452).

In regard to claim 4, Warwick discloses the claimed device except for a feedback circuit. Hayek discloses that it is known in the art to provide a feedback circuit (i.e. a control circuit) (column 10 lines 25-36). It would have been obvious to one having ordinary skill in the art at the time the invention was made to provide the control means of Warwick with the feedback circuit of Hayek, in order to closely control the pressure wave.

10. Claims 5 and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Warwick et al. (U.S. Patent No. 4,838,263) in view of Hayek (U.S. Patent No. 4,815,452) as applied to claim 4 above, and further in view of KEND (EP 542,383).

In regard to claim 5, Warwick in view of Hayek discloses the claimed device except for are silent about the elements of the feedback circuit. KEND discloses that it is known in the art to provide a feedback circuit with means 34 for detecting, means 38 for comparing and means 40 for adjusting the air flow (column 3 line 56 to column 4 line 28 and column 7 lines 2-25). It would have been obvious to one having ordinary skill in the art at the time the invention was made to provide the feedback circuit of Hayek with the elements as taught by KEND, in order to provide a means for automatic and continuous control over the air flow. **In regard to claim 6**, Hansen teaches means 12 for allowing the user to select the oscillation rate (column 2 lines 56-58 and abstract).

11. Claims 8-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Warwick et al. (U.S. Patent No. 4,838,263) as applied to claim 7 above, and further in view of KEND (EP 542,383).

In regard to claims 8 and 9, KEND discloses that it is known in the art to provide a feedback circuit with means 34 for detecting, means 38 for comparing and means 40 for adjusting the air flow (column 3 line 56 to column 4 line 28 and column 7 lines 2-25). It would have been obvious to one having ordinary skill in the art at the time the invention was made to provide the control means of Warwick with the feedback circuit as taught by KEND, in order to provide a means for automatic and continuous control over the air flow. **In regard to claim 10**, Warwick teaches means 12,162 for allowing the user to select the peak pressure (see the rejection of claim 6).

12. Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Warwick et al. (U.S. Patent No. 4,838,263) in view of Werding (U.S. Patent No. 3,536,063).

In regard to claim 13, Warwick discloses the claimed device except for explicitly teaching a remote start/stop control. Werding discloses that it is known in the art to provide a remote start/stop control 6 (Figure 1). It would have been obvious to one having ordinary skill in the art at the time the invention was made to provide the apparatus of Warwick with the remote control of Werding, in order to allow the user to control the apparatus as he is receiving therapy.

13. Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over Warwick et al. (U.S. Patent No. 4,838,263) in view of Werding (U.S. Patent No. 3,536,063) and in further view of Grossan.

In regard to claim 14, Warwick in view of Werding discloses the claimed device except for a timer connected with the remote control. Grossan discloses that it is known in the art to provide a timer 116 operably connected to a control (column 4 lines 55-57 and column 5 lines 3-5). It would have been obvious to one having ordinary skill in the art at the time the invention was made to provide the apparatus of Warwick with the timer of Grossan, in order to limit use of the apparatus to time period of a typical treatment.

Double Patenting

14. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970);and, *In re Thorington,* 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

15. Claims 1,2,4-14 and 20-22 are rejected under the judicially created doctrine of double patenting over U. S. Patent No. 5,769,797 since the claims, if allowed, would improperly extend the "right to exclude" already granted in the patent.

The subject matter claimed in the instant application is fully disclosed in the patent and is covered by the patent since the patent and the application are claiming common subject matter, as follows: an apparatus for generating oscillatory air pulses in a bladder comprising an oscillatory air flow generator including an air chamber, a reciprocating diaphragm, a rod operably connected as claimed, a crankshaft operably connected as claimed and a first motor operably connected as claimed, a positive air flow generator and a control means operatively connected with the oscillatory air flow generator for controlling frequency of air flow generator and operably connected with the positive air flow for controlling peak pressure of the air in a bladder. Also, U. S. Patent No. 5,769,797 disclose an armature by the recitation that the motor is a permanent magnet D.C. brush motor.

Furthermore, there is no apparent reason why applicant was prevented from presenting claims corresponding to those of the instant application during prosecution of the application which matured into a patent. See *In re Schneller*, 397 F.2d 350, 158 USPQ 210 (CCPA 1968). See also MPEP § 804.

Allowable Subject Matter

16. Claims 11,12 and 20 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112 set forth in this Office action and the double patenting rejection and to include all of the limitations of the base claim and any intervening claims.

17. The following is an Examiner's statement of reasons for the indication of allowable subject matter: The prior art of record fails to teach a means connected to the blower's motor for preventing the motor from operating the blower when the pressure is above a predetermined amount in combination with the apparatus as cited in claims 1 and 7. Also, the prior art of record fails to teach the seal and a pump as cited in claim 20 in combination with the apparatus as cited in claim 1.

Conclusion

18. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Christoffel - note the armature (column 4 lines 40-66). Hansen - note the teaching of a permanent magnet D.C. motor (column 2 lines 17-18).

19. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jeanne Clark whose telephone number is (703) 308-0063. Beginning April 1, 1998 all correspondence may be addressed to Art Unit 3733.

J Clark
March 26, 1999

JEANNE M. CLARK
PRIMARY EXAMINER